



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/764,438

01/27/2004

Kenji Shiraishi

248078US2

8684

22850

7590

03/23/2009

OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C.  
1940 DUKE STREET  
ALEXANDRIA, VA 22314

EXAMINER

PETERSON, CHRISTOPHER K

ART UNIT

PAPER NUMBER

2622

NOTIFICATION DATE

DELIVERY MODE

03/23/2009

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com  
oblonpat@oblon.com  
jgardner@oblon.com

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments, see page 6 of Remarks, filed 3/5/2009, with respect to the 35 U.S.C. 112 rejection has been fully considered and is persuasive. The 35 U.S.C. 112 rejection of application has been withdrawn.

2. Applicant's arguments with respect to the 35 U.S.C. 103 rejection filed 3/5/2009 have been fully considered but they are not persuasive.

First, in regard to claim 1, the Applicant argues the Kokubo and Shepherd references do not teach "said timing part measures the elapsed time from the exposure period timing signal right before a beginning of an exposure setup operation...to the beginning of the exposure setup operation" and uses "a time from the beginning of the exposure setup operation to a generation of a next exposure period timing signal...calculated by using the measured elapsed time" (See Remarks, Pg. 7). The Examiner respectfully disagrees. Specifically, noting the Kokubo reference, Fig. 6 and Col. 4, line 16 – Col. 6, line 9 shows the said timing part measures the elapsed time from the exposure period timing signal right before a beginning of an exposure setup operation...to the beginning of the exposure setup operation" and uses "a time from the beginning of the exposure setup operation to a generation of a next exposure period timing signal...calculated by using the measured elapsed time. Kokubo teaches said timing part (5) measures the elapsed time from the exposure period timing signal (VD

Art Unit: 2622

signal) right before a beginning of an exposure setup operation (trigger signal) to the beginning of the exposure setup operation (trigger signal) by said setup part (5) for the exposure period (charge accumulating time), and when a time from the beginning of the exposure setup operation (trigger signal) to a generation of a next exposure period timing signal (VD signal), the time being calculated by using the measured elapsed time (the count on counter 15 when the trigger signal is applied to the (5), is equal to or greater than a predetermined time (delay trigger signal from 21), said imaging apparatus control part (5) shortens the time till the generation of the next exposure period timing signal (VD signal) from a regular exposure period (VD signal) (Col. 5, line 34 – 52). Kokubo teaches that a counter (15) is in the sync. generator (5). This counter (15) creates the VD signal. In the real shutter mode, counter (15) is counting when the trigger signal is applied to terminal (18) of the sync. generator (5). The sync. generator (5) creates a delayed trigger signal through the variable delay circuit (21), which resets the counter (15) and creates a VD signal earlier than the normal VD signal (Col. 5, lines 34 – 52). Examiner believes that when the trigger signal is created the counter (15 with in the sync. generator 5) has a value, which is calculated by way of a counted value. The variable delay circuit (21) creates a predetermined delay which in turn resets counter (15) and creates the early VD signal. Examiner analyzes the timing function is performed by counters (11 and 15) and the calculating function is performed by the logic gates 22, 23, and 26). Applicant argues the exposure setup operation defined by Claim 1, an exposure time is adjusted by setting a number of electric shutter pulses.

Examiner does not read this limitation in claim 1. Claim 1 cites “an exposure setup

Art Unit: 2622

operation configured to set a number of electric shutter pulses to the beginning of the exposure setup operation by said setup part for the exposure period". The exposure setup operation just sets a number of electric shutter pulses (flush procedure of Shepherd) to the beginning of the exposure setup operation by setup part (sync. generator 5 of Kokubo) for the exposure period. For the above reasons, the Examiner believes the Kokubo and Shepherd references do teach the limitations of claim 1

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHRISTOPHER K. PETERSON whose telephone number is (571)270-1704. The examiner can normally be reached on Monday - Friday 6:30 - 4:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tran Sinh can be reached on 571-272-7564. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2622

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/C. K. P./  
Examiner, Art Unit 2622  
3/16/2009

/Sinh N Tran/  
Supervisory Patent Examiner, Art Unit 2622